

CLAIMS

1. A flexible connector formed from a single layer flexible film with printed circuit lines, said flexible  
5 connector comprising a first connection means, and a second connection means, wherein said flexible connector further comprises

a first part extending from the first connection means, wherein said first part is adapted to form a  
10 coiled part encircling a first axis;

a second part extending from the second connection means, wherein said second part is adapted to form a coiled part encircling a second axis; and

a third part interconnecting said first and second  
15 parts.

2. The flexible connector of claim 1, wherein said first, second and third parts comprise two or more strips having essentially the same shape, and intermediate  
20 parts, each having a first and a second dividing line, wherein said first and second dividing lines are parallel, said intermediate parts being arranged between each end of said strips to enable folding along the dividing lines such that said two or more strips form  
overlapping layers after folding.

3. The flexible connector of claim 2, wherein said  
25 intermediate parts are provided with an adhesive.

4. The flexible connector of claim 3, wherein said adhesive is a pressure sensitive adhesive.

5. The flexible connector according to any of the  
30 preceding claims, wherein said second part comprises a first elongated sub-part, a second curved sub-part, and a third elongated sub-part, which third elongated sub-part is adapted to form said coiled part, and said third part comprises a first curved sub-part, a second elongated  
35 sub-part, and a third curved sub-part.

6. A method for manufacturing a flexible connector, said flexible connector comprising a first connection

means and a second connection means, wherein said flexible connector further comprises

a first part extending from the first connection means, wherein said first part is adapted to form a  
5 coiled part encircling a first axis;

a second part extending from the second connection means, wherein said second part is adapted to form a coiled part encircling a second axis; and

a third part interconnecting said first and second  
10 parts, the method comprising the steps of:

printing said first and second connection means, and at least one strip between said first and second connection means provided with connection lines between the first and the second connection means on a single  
15 layer flexible film, wherein said at least one strip forms said first, second and third parts; and

cutting out said printed flexible film.

7. The method of claim 6, wherein said first, second and third parts of said flexible connector comprise two  
20 or more strips having essentially the same shape, and and intermediate parts, each having a first and a second dividing line, wherein said first and second dividing lines are parallel, said intermediate parts being arranged between each end of said strips, said method  
25 further comprising folding along the dividing lines such that said two or more strips form overlapping layers after folding.

8. The method of claim 7, further comprising providing said intermediate parts with an adhesive.

30 9. The method of claim 8, wherein said adhesive is a pressure sensitive adhesive, wherein said folding further comprises applying a pressure on folded parts to activate said pressure sensitive adhesive.

10. A communication apparatus comprising a first  
35 member and a second member, wherein said first and second members are mechanically connected by a two-axis hinge, said communication apparatus further comprising a

flexible connector formed from a single layer flexible film with printed circuit lines, said flexible connector comprising a first connection means adapted to be connected to circuitry in the first member of said communication apparatus, and a second connection means adapted to be connected to circuitry in the second member of said communication apparatus,

wherein said flexible connector further comprises a first part extending from the first connection means, wherein said first part form a coiled part encircling a first axis of said two-axes hinge; a second part extending from the second connection means, wherein said second part form a coiled part encircling a second axis of said two-axes hinge; and a third part interconnecting said first and second parts.

11. The communication apparatus of claim 10, wherein said first, second and third parts comprise two or more strips having essentially the same shape, and intermediate parts, each having a first and a second dividing line, wherein said first and second dividing lines are parallel, said intermediate parts being arranged between each end of said strips to enable folding along the dividing lines such that said two or more strips form overlapping layers after folding.

12. The communication apparatus of claim 11, wherein said intermediate parts are provided with an adhesive.

13. The communication apparatus of claim 12, wherein said adhesive is a pressure sensitive adhesive.

14. The communication apparatus according to any of claims 10-13, wherein said second part comprises a first elongated sub-part, a second curved sub-part, and a third elongated sub-part, which third elongated sub-part is adapted to form said coiled part, and said third part comprises a first curved sub-part, a second elongated sub-part, and a third curved sub-part.